

LOG OF MEETING

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SUBJECT: ASTM International Subcommittee F15.45 for Candle Products

DATE OF MEETING: April 12, 2002

DATE OF LOG ENTRY: July 18, 2003

SOURCE OF LOG ENTRY: Allyson Tenney, Engineering Sciences **(AT)**

LOCATION: Omni Shoreham Hotel, Washington, DC

CPSC ATTENDEES: Allyson Tenney, Engineering Sciences

NON-CPSC ATTENDEES: ASTM F 15.45 members and interested parties

SUMMARY OF MEETING:

The meeting of the ASTM International Subcommittee F 15.45 for Candle Products was held in Washington, DC and conducted by Chairman Jim Becker. Following introductions of all attendees and approval of the minutes and agenda, an update on each task group was provided to the group. The Minutes from the meeting are attached.

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AMERICAN SOCIETY FOR TESTING AND MATERIALS

SUBCOMMITTEE FOR CANDLE PRODUCTS (45)
OF F-15 COMMITTEE ON CONSUMER PRODUCTS

Omni Shoreham Hotel, Washington, DC

Friday, April 12, 2002

Minutes

Chairman Jim Becker of Candle Solutions called the meeting to order at 9:10AM. Introductions by persons in attendance were made.

Approval of Minutes and Agenda

The minutes from the meeting of October 5, 2001 in Nashville were approved, as amended, on a motion duly made and seconded. The agenda for the meeting was amended to include a video produced for the National Candle Association (NCA) highlighting its efforts to promote candle safety and to change the position of the report from the Smoking Task Group.

Membership Report

Jim Becker presented the report. The Subcommittee has 85 members. There are 73 voting members (27 Producers, 6 Consumers, 39 General Interest, 1 Unclassified) and 12 non-voting members (4 Producers, 8 General Interest). George Pappas of Lumi-Lite Candles noted that he had encountered numerous problems with the recently instituted online voting system and about 10% of the voting membership reported they, too, have had problems. Colin Church of CPSC and Jim Hoebel asked that the particulars of the problems be reported to them so that they could pass the information on to ASTM.

NCA Video

The NCA has produced a video of excerpts from television news reports telecast during the holiday season that were based on information provided to the media by NCA. There were at least 90 news reports in 40 media markets utilizing portions of the NCA information. This video was shown to the Subcommittee.

Report of the Task Group on Smoking

George Pappas presented the Task Group report. The Task Group has become aware of two other methods used to determine smoking of candles. These will be presented by Carl Hudson of ExxonMobil and contrasted with the current Task Group method. Bob Moss of FTI/SEA Consulting will present the method currently under development by the Task Group. There will also be discussion on balloting of the method and other issues.

Carl Hudson discussed the apparatus for the proposed method. A glass slide is suspended over a burning candle to collect a sample of smoking emissions. The deposition on the slide is measured with an optical densitometer.

Schumann-Sasol is working on a method with many similarities. A candle is placed on a balance to measure weight loss during burning and surrounded with a screen to minimize drafts. The method also utilizes a glass slide suspended above the candle. An instrument is used to measure transmission of light through both clean and test slides. The apparatus was available for viewing by the attendees. This method is under development by the German candle association.

An IKEA method uses a filter to collect emissions of a candle burned in a chamber. Airflow is drawn through the filter. An air puffer produces small disturbances in the flame. The Bacharach Oil Burner Scale is used to rank the appearance of the filter on a scale from 0 to 9. An IKEA representative was present to discuss this method, as necessary, by individual members. This method requires comparison to some type of reference candle for valid comparison of results. George Pappas asked if there is an equilibration period for the candle burn test – it was indicated that the candle's wick must be trimmed and burned for at least ½ hour prior to commencing measurements.

Bob Moss explained that the Task Group method also uses a “standard” compression molded candle containing no dye or fragrance fitted into a particular glass to determine repeatability. A copy of the draft method was available for the attendees. Despite indication of interest to participate by other laboratories, results from only one additional lab have been received since the last meeting. The Task Group still believes the small variability of the method is due to variations in the test candles themselves and that the method has good repeatability and reproducibility. Bob asked for interested parties to use this method for the next 60 days and to provide feedback by June 15. The intention of the Task Group is to ballot the method shortly thereafter.

George indicated that the Task Group continues to provide the “standard” candle – requests to receive samples of the candle should be directed to Bob Moss. The process for development of a final standard was discussed. The required repeatability and reproducibility data will have to be gathered by a formal round-robin testing protocol, and it may be the case that the method will not give the required consistency.

Report of the Data Task Group

There is no new fire incidence data to report. However, Sue Kyle from CPSC presented information on CPSC's Preliminary Report on In-Depth Investigations Involving Candles. CPSC gets information from NFIRS, newspapers, consumers, fire departments, and various databases. Information related to candles tends to be random. CPSC has approximately 90 investigators that can do follow-up field investigations, collect data, take photos, etc., that result in in-depth reports on specific incidences. The report considered 593 in-depth investigations over several years. A subset of 112 cases was felt to pertain to situations that could be addressed by the Subcommittee (example – tipovers

by animals were excluded). Copies of any specific IDI report, the summary Sue developed, or the report itself can be obtained by request from CPSC. Some of the information is available at www.cpsc.gov.

The Preliminary Report lists 30 fire incidences related to candle flare-ups (12 gel candles and 18 wax candles). One-half of the gel incidences can be attributed to two specific candle types. Tealights were involved in a large number of the wax candle flare-ups, while several others appeared to have a flammable coating or paint. There were five reported candle explosions. In the reignition category, some cases could likely be attributed to consumers who believed they had put the candle out but actually had not. Tipovers were involved in a substantial number of incidences.

Sue observed that low fuel levels seemed to be involved in large numbers of fires. Heat tolerance and flammability of containers was another large issue.

Jim Hoebel questioned Sue about incidences involving freestanding candles that may have ignited nearby combustibles when burned low. Sue didn't recall large numbers of incidences involving freestanding candles. She also didn't remember incidences involving decorative accessories. Jim Hoebel asked about the "preliminary" status of the report and Sue indicated that it meant that the other cases had not been examined fully, but she felt they were likely to be not as relevant. J.C. Edmond of General Wax and Candle asked for further information on the excluded incidences – Sue said that those investigation reports tended to not contain much information at all. J.C. asked if more information could be obtained for those investigations. Sue said that often fires destroyed anything that may be useful or that the candles themselves might be involved in lawsuits and not available to CPSC. A question was asked if many flare-ups could be attributed to candle inclusions, intentional or otherwise. Sue said cinnamon sticks and beans were involved in some, but she didn't remember specific instances of involvement of unintentional inclusions. A question was asked about the predominance of gel fires and Sue cautioned about reading too much into that data since the sample is not statistical.

Jim Becker observed that he had looked at the report in some depth himself. He thanked CPSC for providing information that will be helpful to the Subcommittee in developing data-driven standards. He also observed that, in his experience, reignition of candles would seem to be an extremely rare result and that there may need to be some reconsideration by CPSC of that category. Kathy LaVanier of Lancaster Colony suggested that some of the reignition incidences might actually involve delayed fires of surrounding combustibles. George discussed continued smoldering or after-glow of wicks, but again indicated that reignition was virtually non-existent with the treated wicks produced in the U.S.

J.C. suggested that "explosion" might be a misnomer – shattering of containers is the more likely phenomenon. Sue said at least one case involved spattering of wax. It was suggested that throwing water on the candle might have been involved. J.C. suggested that future labeling containing a warning against use of water to extinguish candles might be considered. J.C. again thanked CPSC for their efforts.

Report of the Glass Container Task Group

Linda Allison, co-chair of the Task Group, presented the report. She recognized the members of the Task Group. The Task Group balloted Subcommittee F15.45 in November 2001. There were 70 returned ballots with no negative votes. Some editorial changes were submitted to Committee F15 with its ballot. There were over 300 ballots returned by the Committee, again with no negative votes. It is anticipated that the standard, with editorial changes, will be published May 11, 2002 – the designation will be F2179-02.

Work remains to further develop a section on attributes and to validate the scratch test method. George asked how the standard could be obtained. It was indicated that, once published, the standard could be purchased from ASTM. Colin Church indicated that standards still under review by ASTM can be obtained by members of the Subcommittee for free from the website.

Report of Candle Fire Safety Task Group

Jim Becker thanked the Task Group members for diligent work during the year since formation. He indicated the Task Group is close to balloting a standard, to be presented by co-chair Bob Moss.

Bob gave a brief history of Task Group actions. The Task Group consists of 19 members (6 producers, 6 suppliers, 2 retailers, 2 public interest, 2 NCA, 1 fire service). The Group has conducted numerous face-to-face meetings and teleconferences. The Group has identified eight areas for potential action. The draft standard contains two methods and four specifications. All specifications requiring burning of candles use the same test method. The standard does not yet cover all forms of candles, but more are likely to be included later. Bob asked for comments in the next week, as the Task Group will next meet in Columbus, Ohio in two weeks and wants to include the comments in the provisional standard to be balloted.

A question and answer period ensued. Colin Church commented that he believes a provisional standard can be changed during the two year provisional period. Jim Becker said that Kathie Morgan of ASTM has indicated differently in discussions with him. There was a question regarding whether institutional and religious candles could be excluded. Jim Becker indicated that this could be considered. Jim Hoebel asked Sue Kyle if the IDI contained fire incidences related to religious candles – she thought they did. There was a question about trimming of wicks. The draft method specifies to trim the wick only-if indicated in the candle's directions. Bob Moss explained the Task Group has decided that not trimming the wick when instructed in such instances would be consumer misuse. There was question about the specified 3" maximum flame height being excessive. It was explained that this specification includes all candles, including tapers. It is the consensus of the Task Group that, as a fire safety standard, this specification is reasonable.

Colin Church commented that he was pleased that the progress toward a standard during the last year appears significant. He is hopeful that the proposed standard will result in lower loss of life. Improvements can be made to the standard at a later time to further improve results. He thanked the Task Group for its efforts.

New/Old Business

There was a question regarding inclusion of terminology from newly created standards into the Terminology Standard. Jim Becker will clarify this issue further with Kathie Morgan. Jim's understanding is that terminology defined in other standards can be incorporated relatively easily into the Terminology Standard.

Eileen Hedrick of Belmay indicated the Terminology Task Group would meet in the near future to consider further inclusions in the terminology standard. There was a question whether the Task group will consider vegetable or natural wax candle definitions. Eileen indicated this would be considered.

CPSC indicated the Commission will likely vote in the next two weeks concerning the notice of final rule on the lead wick ban.

Jim Becker further reiterated the progress made recently, the actions soon to be balloted, and again thanked CPSC and various members for their help.

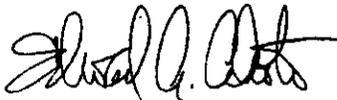
Future Meeting

The next meeting of the Subcommittee will be in Las Vegas, Nevada at Caesars Palace on Friday, September 13, 2002 at 9:00AM.

Adjournment

This Subcommittee meeting was adjourned at 11:48AM on a motion duly made and seconded.

Respectfully submitted,



Edward A. Calcote
Secretary, Subcommittee F15.45